Celebrating a History of Excellence:

Federal Aviation Administration/Civil Aviation Administration of China Executive Level Cooperation and the Agreement Process

The Federal Aviation Administration's (FAA) predecessor organization, the Department of Commerce Aeronautics Branch took an early interest in China, as it did with other nations. As early as November 1931, the Aeronautics Branch published "procedures governing flights in China by American airmen." Those rules required pilots to provide details of the proposed flight to the Chinese Government one month in advance of the contemplated flight. Flight details had to include the name of the aviator, type and symbol of the airplane, type and horsepower of the motor, as well as information on any stops and the length of stay. The flight could not take place until the pilot received permission from the Chinese government. Photographic apparatus, radio instruments, mail, and merchandise could not be transported into China, however, arms and munitions for self-defense could be brought into China if the pilot received prior approval from the Chinese government. A revised requirement published in December 1931mandated that airmen "desiring to fly foreign airplanes into China must also inform the Ministry of Foreign Affairs at Nanking five days prior to entering Chinese territory, to enable the Chinese Government to notify local authorities."

As the number of U.S. citizens living in and visiting China increased, the Bureau of Air Commerce (the Aeronautics Branch had been renamed in July 1934) announced it had hired, on a part-time basis, someone to handle applications for renewal of airmen and aircraft certificates. In late 1934, Allen L. "Pat" Patterson, president of the Airmotive Company in Shanghai, became the agency's first representative in China. Serving as a Bureau of Air Commerce inspector for several years, Patterson found himself in the midst of the second Sino-Japanese War in July 1937. By November, the Japanese army was advancing toward Nanking, operating on the bank of the Yangtze River. On December 5, the U.S. Embassy issued an evacuation notice stating "The Embassy considers it inadvisable that Americans remain longer in Nanking. All Americans are urged to foregather at the Embassy west compound tomorrow morning, December 6th, at 9:30 a.m., to proceed in a group to the Bund and embark on the USS *Panay*." 3

While evacuating from Shanghai to the *Panay*, a *New York Times* reporter talked to Patterson:

A. L. Patterson, an American airplane salesman who passed through Chinkiang Monday, arrived here last night and reported that that city, the former Kiangsu capital, with a population of 200,000, was a mass of flames and ruins. He said the city had been fired by the Chinese themselves. Mr. Patterson, whose trip from Shanghai took ten days, came by a tortuous route along the north bank of the Yangtze from Tungchow, and took a junk from a new boom sixteen miles from

¹ "Procedure Governing Flights in China by American Airmen," *Air Commerce Bulletin*, 3:9 (November 2, 1931): 236.

² "Revise Procedure Governing Foreign Flights in Japan and China," *Air Commerce Bulletin*, 3:12 (December 15, 1931): 306

³ As quoted in "Suddenly and Deliberately Attacked! The Story of the Panay Incident," http://www.usspanay.org/attacked.shtml (June 2, 2010).

Nanking to reach this city. He said the new boom was a flimsy string of small boats linked by cables, which, though doubtless mined, did not appear hard to break ⁴

Patterson made it safely to the U.S. Navy gunboat *Panay*, anchored in the Yangtze River outside of Nanjing. He was onboard the *Panay* on December 12, 1937, when the Japanese attacked and sunk the ship. Patterson survived the attack.⁵ After evacuating China, Patterson eventually returned, and, as president of the Consolidated Trading Company, represented U.S. aircraft manufacturers in China hoping to sell aircraft to the Chinese military.⁶

On October 1, 1949, after the Chinese communists defeated the nationalists, Mao Zedong proclaimed the founding of the People's Republic of China (PRC). He quickly established a political and economic order modeled on the Soviet example. The new government created the CAAC in 1949 to manage all non-military aviation in the country and provide general and commercial flight service. The defeated Chinese Nationalist government under Chiang Kai-shek established the Republic of China with its capital in Taipei, Taiwan. The U.S. recognized only the Republic of China. With the outbreak of the Korean War in 1950, the United States government prohibited all trade and travel to China. The ban lasted over twenty years, until November 22, 1972, when President Nixon lifted the restriction on travel of U.S. airliners to the People's Republic of China as part of a general rapprochement between the two countries.

On January 1, 1979, the U.S. and China resumed diplomatic relations. In September of the following year, the U.S. and China signed a bilateral air transportation agreement that granted each country the right to designate two airlines to provide international service between the nations (subsequently expanded to additional airlines⁷). The agreement limited the number of flights each country's airlines could operate and restricted those flights to two airports in China and five in the United States. In addition, each nation had the right to review and reject fares charged by the other's airlines. As a result of this agreement, on January 7, 1981, a Civil Aviation Administration of China (CAAC) Boeing 747 touched down at San Francisco International Airport, marking the resumption of air service between the People's Republic of China and the United States for the first time since 1949.⁸

The resumption of air service between the two countries paved the way for greater cooperation between FAA and Chinese aviation officials. In 1982, for example, FAA Administrator J. Lynn Helms invited a CAAC delegation to the Agency to learn about FAA's airworthiness processes.

⁴ F. Tillman Durdin, "Chinese Make Stand," Special Cable to the *New York Times*, http://www.ne.jp/asahi/unko/tamezou/nankin/1937-12-08-NewYorkTimesTillmanDurdin.html (May 27, 2010).

⁵ "Bureau of Air Commerce Appoints a Representative in China," *Air Commerce Bulletin*, 6:6 (December 15, 1934): 154; Charles Barton, "Wings for the Dragon," February 4, 2008, http://warandgame.blogspot.com/2008/02/wings-for-dragon.html (May 27, 2010).

⁶ Guangqui Xu, War Wings: The United States and Chinese Military Aviation, 1929-1949 (Greenwood Press, 2001): 131, http://www.warbirdforum.com/xu.htm (May 27, 2010).

⁷ On April 8, 1999, the United States and China signed a new bilateral aviation agreement that updated one signed in the 1980s. The agreement helped liberalize restrictions on passenger and cargo flights between the two trading partners. Under the agreement's terms, the number of carriers, flights, and departure and destination points from both countries would increase over the next two years. In 2004 and 2007, even more liberal agreements were concluded.
⁸ Gabriel S. Meyer "U.S.-China aviation relations: flight path toward open skies?," *Cornell International Law Journal*, September 22, 2002 (http://heinonline.org).

The Chinese delegation received a 5-week immersion course, and the FAA subsequently offered a reimbursable technical assistance program to help the Chinese establish airworthiness regulations. In response to the offer, the Chinese suggested the two nations establish an "umbrella" agreement with details to be negotiated at a later date. In July 1984, while on a Presidential Trade Mission to China, Vice President George Bush's assistant, Craig Fuller, signed an agreement with the Chinese that called for early discussions on a civil aviation cooperative agreement and a bilateral airworthiness agreement.⁹

In another gesture of goodwill and cooperation, the Director General of the CAAC, Hu Yizhou, met with FAA Assistant Administrator for International, Donald Segner, at a 1984 Asia-Pacific director's general meeting and confirmed that the CAAC would assume FAA-type regulatory responsibilities, including airworthiness assurance. Later that year, Hu Yizhou invited FAA maintenance personnel to assess CAAC maintenance facilities and staff competence for sign-offs on maintenance of its Boeing 747s. This signaled the beginning of FAA/CAAC cooperation on safety matters.

Following years of informal conversations between FAA and Chinese aviation officials, in May 1985, Donald Engen became the first FAA Administrator to visit China. China had recently launched a major program to improve and expand domestic and international airline service and its national airspace and airport system. It also planned to expand its civil transport production. The time seemed appropriate for more formal discussions to establish closer cooperation in aviation matters.¹⁰

While in China, Engen reached an agreement in principle with his counterpart for airworthiness cooperation. The trip was followed by a CAAC visit to FAA headquarters in March 1986. 11 On March 14, Engen and Hu Yizhou signed a formal, 5-year memorandum of agreement (MOA) for technical cooperation and Annex 1 to that agreement, which provided for the exchange of personnel and technical information and recognized FAA responsibilities to inspect MD-80 production at the McDonnell Douglas-Shanghai Aviation Industries Corporation facility. 12 To implement the MOA, the FAA and CAAC agreed to develop additional annexes to identify specific projects. The annexes would be developed by the FAA or CAAC, normally via correspondence, as required. In August 1987, the FAA and CAAC signed MOA Annex 2 on airworthiness training. Annexes 3 through 5, concerning air traffic control training, national airspace system planning, supply support, and flight simulator evaluation, were signed on August 5, 1988. 13 In January 1991, the FAA and CAAC signed an amendment to the original MOA extending it for another five years. 14

¹¹ "Memorandum of Agreement for Technical Cooperation in the Field of Civil Aviation Between the Department of Transportation Federal Aviation Administration and the People's Republic of China Civil Aviation Administration of China," March 14, 1986, FAA Historical Archives, File III 17.K.

⁹ "Chronology of Events: FAA and CAAC Relations," January 1, 1997, FAA Historical Archives, File III 17.K. ¹⁰ "The Dragon Invites the Eagle," *FAA World* (August 1985): 4-10.

¹² U.N. Treaties, "Annex I to the Memorandum of Agreement for Technical Cooperation in the Field of Civil Aviation Between the United States of America Department of Transportation Federal Aviation Administration and the People's Republic of China Civil Aviation Administration of China," volume 2246, A-39959, http://untreaty.un.org/unts/144078_158780/4/7/12460.pdf (June 7, 2010).

¹³ "U.S. and China Sign Aviation Agreement," U.S. Department of Transportation Press Release, March 14, 1986, FAA Historical Archives, File III 17.K. The complete list of Annexes to the 1986 MOA includes:

The late 1980s and early 1990s saw a plethora of FAA visits to China to inspect, assess, and make recommendations on China's aviation processes and plans, as well as to train Chinese aviation specialists in air traffic control and airworthiness procedures. In addition, a number of Chinese delegations came to the United States to tour FAA facilities, meet with FAA officials, and discuss a number of cooperative programs. To facilitate coordination activities, in December 1993, FAA opened a liaison office in Beijing. Fred Lee was the first FAA representative assigned to the new office. ¹⁵ Lee remained in Beijing until he retired from the Agency in October 1996. ¹⁶

One reason for the increasing FAA/CAAC cooperative efforts was China's intention to reform the management and improve the safety of its aviation system. China's Seventh Five-Year Plan (1986-1990) called for extensive reform of the CAAC. As part of those efforts, CAAC became primarily an administrative and regulatory agency. Modeled after the FAA, the new CAAC became responsible for formulating aviation policy and development plans, negotiating international air transport agreements, instituting technical standards for airline and airport operations, managing civilian air traffic control, issuing air operator licenses, monitoring safety and airworthiness, regulating air fares, coordinating aircraft acquisitions, setting rules on airlines' financial accounting and reporting, and supervising aviation training schools.¹⁷

Improving safety was of particular concern for the Chinese. Between 1987 and 1991, the CAAC relinquished control over the daily operations of its airlines, and began focusing its energies more on system safety. After decentralization, each of those six airlines assumed control of its own management, operation, and profitability. Once decentralized the airline industry grew quickly. By 1994, China had 40 airlines. The exponential growth of airlines strained China's aviation infrastructure and raised concerns about safety.¹⁸

Annex 1	1986	MD-80 Production Surveillance
Annex 2	1987	Airworthiness Training
Annex 3	1988	ATC Training Procedures
Annex 4	1988	Air Traffic Services System Planning
Annex 5	1988	Supply Support
Annex 6	1988 (rev 1994)	Flight Simulator Evaluation/Qualification
Annex 7	1994	Temporary Duty (TDY)
Annex 8	2000	Joint Research and Development Projects
Annex 9	2007	Equipment Purchase and Build
Annex 10	2009	Aircraft Certification Technical Assessment
Annex 12	2010	Temporary Duty (TDY)

¹⁴ Robyn Cicero, FAA Office of International Aviation, Asia-Pacific staff, email message to Theresa Kraus, June 10, 2010.

¹⁵ Robyn Cicero, FAA Office of International Aviation, Asia-Pacific staff, email message to Theresa Kraus, June 8, 2010.

¹⁶ Elizabeth Keck replaced Fred Lee as the FAA representative, serving from October 1996 until January 2002; Joe Tymczyszyn was the third representative in China from October 2002 until December 2006; Chris Metts served from August 2006 until August 2008; and Pat Power became the FAA representative in October 2008.

¹⁷ Thuong T. Le, "Reforming China's Airline Industry: from State-Owned Monopoly to Market Dynamism," *Transportation Journal*, December 22, 1997, http://www.allbusiness.com/legal/laws-government-regulations/656609-1.html (June 3, 2010).

¹⁸ Le, "Reforming China's Airline Industry: from State-Owned Monopoly to Market Dynamism."

To facilitate mutual cooperation in the safety of aeronautical products, the FAA and CAAC signed a bilateral airworthiness agreement (BAA) in October 1991. The agreement allowed the FAA and CAAC to create implementation procedures for mutual acceptance and approval of those products upon which they agreed. The provisions of that agreement were subsequently expanded to allow U.S. acceptance of small airplanes and certain aircraft components designed and manufactured in China for U.S. certification. Harbin Aircraft Manufacturing and the CAAC applied for FAA Part 23 certification of the Harbin Y-12 airplane in September 1992. This led to modification of the Y-12 II to meet U.S. requirements. In March 1995, the FAA certified the Harbin Y-12 IV, allowing the Chinese aircraft to be exported to the United States.¹⁹

FAA Administrator David Hinson travelled to China November 11-14, 1994, the second Administrator to do so. A key reason for Hinson's trip was to lay the groundwork for an extension to the original MOA. While in China, Hinson's discussions with the CAAC centered on regulation and certification and civil/military coordination of air traffic control.²⁰ As Hinson explained:

The PRC and the United States are hoping to extend technical cooperation beyond the expiration of the present agreement . . . We also expect to agree on setting up a training program for accident investigation. And, we are going to try to make it easier for FAA personnel to come to the PRC to evaluate flight simulators . . . But, from a broader perspective, there are several important issues in which our interests overlap . . .

- The allocation of airspace for military and civil use;
- The improvement of aviation safety during a period of rapid expansion;
- The role of the new air traffic control technology in enlarging capacity and promoting safety;
- And, the question of how to most effectively organize the civil aviation agencies of government to carry out their regulatory functions and their responsibilities for safety oversight.²¹

During this visit, Hinson and CAA Minister Chen Guangyi signed the second amendment to the 1986 MOA, which extended it indefinitely.²² They also signed a revised Annex 6 for flight simulator evaluations and Annex 7 for FAA temporary duty assistance.²³ In December 1994, a Chinese delegation led by Guangyi visited the FAA in Washington, DC. During the visit, Hinson and Guangyi signed agreements for cooperation in the areas of flight standards, air traffic, and security.²⁴

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¹⁹ Paul Lewis and Ramon Lopez, "FAA breaks new ground with Y-12," *Flight International*, April 12-18, 1995, http://www.flightglobal.com/pdfarchive/view/1995/1995%20-%201045.html (May 28, 2010); "FAA Certifies First Chinese Aircraft," FAA Press Release APA-21-94, March 31, 1995, FAA Historical Archives, File III 17.K.

²⁰ "International Aviation: Hinson Talks About His Recent Trip to Asia," *Headquarters Intercom* (December 20, 1994): 1, 6.

²¹ David Hinson, speech to the Aerospace Forum of the U.S. Chamber of Commerce, Beijing, China, November 12, 1994, FAA Historical Archives, File III 17.K.

²² Robyn Cicero email message to Theresa Kraus, June 10, 2010.

²³ "Chronology of Events: FAA and CAAC Relations," January 1, 1997, FAA Historical Archives, File III 17.K.

²⁴ "China Connection," *Headquarters Intercom* (January 3, 1995): 1.

As part of the flight standards cooperative program, FAA's Flight Standards organization and the CAAC established a Joint Steering Committee known as the Joint FAA/CAAC Flight Standards Operations and Maintenance Safety Steering Group. The Steering Group meets annually to discuss joint efforts. In addition, the FAA and the CAAC agreed to a joint initiative to assist China in identifying improvements needed in its flight standards operations and maintenance oversight system. To guide this effort, the FAA and CAAC developed a three-phased program that included a joint safety review of China's aviation system. In the report, released in March 1997, the team said that the CAAC met requirements for international safety oversight standards. However, to keep pace with the rapid growth of civil aviation in China, additional resources would be needed for the CAAC to provide effective oversight in the future. ²⁶

Cooperative FAA/CAAC work continued at a rapid pace as China's aviation system growth surpassed that of most of its international partners. On a visit to China in February 2004, FAA Administrator Marion Blakey met with CAAC Minister Yang Yuanyuan to discuss the broad range of FAA/CAAC activities that supported aviation safety, efficiency, and capacity. As a result of the meeting, Blakey and her counterpart signed a record of discussion documenting their agreement to promote continued cooperation in flight standards, air traffic services, aircraft certification, airport safety management, training, safety data, and planning and finance.²⁷

To further expand its aviation partnership with China, on April 6, 2004, the FAA, in partnership with the U.S. Trade and Development Agency (USTDA) and U.S. aviation corporations, launched the U.S.-China Aviation Cooperation Program (ACP). The founding members of the ACP included Boeing, General Electric, Honeywell, Lockheed Martin, Parker, Raytheon, Rockwell Collins, United Airlines, UPS, and United Technologies. (By 2010, the number of industry partners had risen to 42.) In announcing the establishment of the ACP, Jeffrey Shane, Under Secretary for Policy at the Department of Transportation, stated,

The Aviation Cooperation Program will increase awareness of U.S. technology, product standards, and services, while promoting safer operations and more efficient management in China's aviation sector. These efforts, I believe, will lead to an increase in job growth and trade between our two nations while helping us to move forward together towards a common future in the aviation industry . . . Through this Partnership, we will be able to make more efficient use of U.S. public and private sector resources in tackling safety challenges. Our Federal Aviation Administration, which provides aviation safety oversight in the United States, is strongly committed to this effort, and is extremely enthusiastic about the

²⁶ "U.S.-China Report Says Additional Resources Required to Ensure Future Safety of Chinese Civil Aviation," FAA News Release, APA 33-97, March 3, 1997, FAA Historical Archives, File III 17.K.

²⁵ "China Aviation Background," FAA Historical Archives, File III 17.K.

²⁷ Record of Discussion between the Federal Aviation Administration Department of Transportation United States of America and the General Administration of Civil Aviation of China," February 26, 2004, FAA Historical Archives, File III 17.K.

²⁸ "USTDA sign memorandum of understanding for the Wright Brothers Partnership – US/China Aviation Cooperation Program in China," U.S. Embassy Beijing China Press Release, April 6, 2004, http://beijing.usembassy-china.org.cn/0406.html (May 27, 2010).

prospect of developing closer working relationships, at all levels, with the CAAC.²⁹

The USTD provided significant monetary grants to the CAAC for aviation development. For example, in 2004, it provided a \$500,000 grant to the CAAC to support the start-up of the ACP. In October 2005, it contributed \$1.266 million to fund several ACP projects that involved U.S. aviation experts providing technical assistance on new aircraft certification procedures in China as well as the provision of technical and managerial training to CAAC officials under the executive management development training program (EMDT). The first EMDT program provided a wide range of executive, managerial, technical, and operational training. Thirty-five Chinese executives participated in the first training program.

The following year, the USTDA approved grant funding of \$1.689 million to support four new projects, including assistance to the CAAC with the oversight and certification of the development and manufacture in China of the ARJ-21 regional jet, a new proposal to assist the CAAC in adopting best practices for air traffic flow management, another version of the EMDT, and an initiative to expand the market for regional and general aviation in China.³² In October 2007, the second EMDT, opened with two weeks in China, followed by 12 more weeks in the United States. It focused on leadership skills, strategic planning, project management, and advanced human resources management, as well as air traffic management system, aviation/project management, and introduction of new technologies.³³

The USTDA approved a grant in June 2008 to support three ACP new projects: a third version of EMDT; an advanced effort to assist the CAAC with the development and institutional structures necessary to expand general aviation operations in China; and a new proposal to assist the CAAC in developing enhanced management skills of first-line supervisors of air traffic controllers. In 2009, the fifth USTDA grant supported three projects: a fourth version of EMDT; a new proposal to assist Chinese airports with the inclusion of environmentally friendly practices in airport development; and a new project to provide executive training to air traffic managers. The USTDA also funded a project that brought 12-15 Chinese airport and CAAC officials to the U.S. for an airports-related orientation visit. In September 2009, it supported a project to help the CAAC analyze the airspace and potential runway configuration at a proposed second airport in Beijing. Another grant in April 2010 sponsored a fifth session of the EMDT program, a second session of executive management training for 24 air traffic managers, and an air traffic flow management seminar for regional air traffic officials.³⁴

In April 2004, the FAA and CAAC further strengthened their relationship with the establishment of the U.S./China Joint Air Traffic Steering Group. The steering group's primary role was to

²⁹ Jeffrey Shane, Under Secretary for Policy at the Department of Transportation, Remarks to the China-U.S. Aviation Symposium, Beijing, China (http://ostpxweb.dot.gov/S-3/Data/China%20Aviation%20Conference-Beijing%20(4-6-04).pdf (May 27, 2010).

³⁰ "U.S.-China Aviation Cooperation Program," FAA Historical Archives, File III 17.K.

[&]quot;US aviation industry provides training for Chinese aviation executives," 10/7/2007, http://english.eastday.com/eastday/englishedition/nation/userobject1ai2962413.html (May 28, 2010).

^{32 &}quot;U.S.-China Aviation Cooperation Program."

^{33 &}quot;US aviation industry provides training for Chinese aviation executives."

^{34 &}quot;U.S.-China Aviation Cooperation Program."

identify and implement annual cooperative programs on air traffic topics, such as the implementation of new technologies, air route development, and the application of the global positioning system.³⁵ On October 20, 2005, the FAA and CAAC signed a bilateral aviation safety agreement (BASA) designed to reduce duplicative regulatory requirements in mutually agreed upon areas and further enhance cooperation in aviation safety. As FAA Administrator Marion Blakey explained,

These agreements are an excellent means of solidifying our mutual resolve for safety. I can't say enough about the robust growth of aviation in China, and about how the People's Republic is handling it, how it is preparing for the increases that are sure to come as well. Now the FAA has a relatively long relationship with China. This BASA is just one example of the joint commitment we share. We will be establishing an office in China as well, if things go as I expect, Minister Yang, and this is in addition to our Beijing office. Now we are talking about Shanghai. So, you see, we want to be very strong partners in all of this, and this office will be staffed by our aircraft certification organization to make sure that China and we develop the right expertise to make sure that aircraft are exactly as they should be, moving into new aircraft in the Twenty-first Century.³⁶

In March 2007, after receiving Department of State approval two years earlier, the FAA posted Office of Aviation Safety, Aircraft Certification, personnel in Beijing, near the CAAC headquarters, and in Shanghai, near the CAAC's certification office. FAA's International Technical Assistance Branch, headquartered in Shanghai, had three FAA employees – a flight test pilot who also served as branch manager, an electrical systems engineer, and a mechanical systems engineer – as well as one local hire. Two FAA employees staffed the Beijing office – one manufacturing inspector and one structures engineer.³⁷ Personnel had primary responsibility to support the CAAC during its certification of the ARJ-21 regional jet.³⁸ The FAA team mentored their CAAC counterparts and assisted them in certifying aircraft and establishing an airworthiness system, equivalent to FAA standards. From 2006 to August 2008, the FAA personnel observed tests, commented on certification test plans, provided on-the-job training to the CAAC, and prepared a technical readiness report for FAA safety managers to help future decisions related to airworthiness expansion. ³⁹ FAA's Flight Standards organization opened a

^{35 &}quot;China Aviation Background."

³⁶ "The Challenge," Speech to the 2nd International Aviation Safety Forum, October 20, 2005, http://www.faa.gov/news/conferences_events/2ndSafetyForum/media/1020Opening%20Remarks%20and%20YYY. doc (May 2, 2010).

37 "International Technical Assistance Branch," FAA Historical Archives, File III 17.K.

³⁸ FAA Safety Highlights, March 15, 2007,

https://employees.faa.gov/org/linebusiness/avs/com/highlights/2007/0315/ (May 28, 2010); "Procedure on Communication between FAA Technical Assistance Branch and CAAC," AP-ARJ21-01, effective date January 5, 2007, http://www.caac.gov.cn/B1/GLCX/200807/P020080701519083644165.pdf (May 28, 2010).

³⁹ In September 2008, FAA restructured the International Technical Assistance Branch in China. All aircraft certification personnel transitioned to new assignments, and FAA's Office of Safety's presence in Beijing was permanently phased out. FAA retained an aviation safety inspector in Shanghai to continue mentoring CAAC's certification personnel and support conformity issues and U.S. manufacturers. However, the Shanghai office space remained unoccupied from September 2008 until the arrival of a new senior aviation safety inspector in February 2009. Subsequent to the new FAA employee's arrival, a local hire came on board to assist the branch with the dayto-day activities. In September 2009, FAA moved the Shanghai office to a more cost-effective location elsewhere in

two-person Beijing satellite office of the Singapore International Field Office in 2008 to regulate numerous FAA certificated maintenance facilities in China and offer technical guidance to their Chinese counterparts. ⁴⁰ FAA's technical support to China proved instrumental in strengthening aviation safety ties with the CAAC.

FAA Administrator Marion Blakey met with her CAAC counterpart in China in June 2007. While there, she and CAAC Minister Yang Yuanyuan signed another record of discussion with the CAAC charting areas of continued international cooperation between the two countries. They expressed their intent to build upon this strong foundation by continuing the broad range of cooperative activities that support the safety, efficiency and capacity of air transportation serving the United States and the People's Republic of China, as well as expanding the scope of future efforts.⁴¹

A key part of their discussions centered on evolving Chinese air traffic control technology in parallel with the FAA's Next Generation Air Transportation System (NextGen). As Blakey explained, "We . . . want to develop a system that will span the Pacific . . . and be completely interoperable." Other areas of cooperation included maintaining the pace of safety improvement in China, the environment, and flight standards, especially FAA assistance in helping the Chinese certify their ARJ-21 regional jet. ⁴² A memorandum of understanding (MOU) followed the record of discussion on February 28, 2008. The MOU, created to help the U.S. and China better harmonize their future air traffic management systems, covered NextGen initiatives. As part of the agreement, the FAA and CAAC planned to establish a NextGen Air Traffic Management Steering Group, similar to the Joint Air Traffic Steering Group formed in 2004. ⁴³ Another MOU, signed by the FAA, CAAC, and the USTDA, the following year, on April 7, 2009, established the first U.S.-China Environmental Partnership to share best environmental practices at airports. ⁴⁴ This MOU was an initiative of the strategic economic dialogue fostered through ACP activity.

In 2008 a number of things occurred that threatened to delay FAA/CAA cooperative efforts. In March, the CAAC, created in 1949 to manage all non-military aviation in the country and provide general and commercial flight service, underwent a significant institutional change from an independent ministry to a subsidiary of the newly created Ministry of Transport. At the same time, within the United States, the Departments of State and Justice mandated that all FAA technical assistance agreements include a new, more stringent liability clause. The new liability

Shanghai. In June 2010, the aviation safety inspector stationed in Shanghai returned to the U.S. The local hire remained employed in the office, while FAA worked to identify a replacement employee to staff the position. "International Technical Assistance Branch," FAA Historical Archives, File III 17.K.

⁴¹ "Record of Discussion between the Federal Aviation Administration Department of Transportation United States of America and the General Administration of Civil Aviation of China People's Republic of China," FAA Historical Archives, File III 17.K.

Theresa L. Kraus, FAA historian, July 1, 2010

^{40 &}quot;China Aviation Background."

⁴² "Administrator Blakey Visits China, Expands International Cooperation," *Focus FAA*, June 5, 2007, https://employees.faa.gov/news/focusfaa/story/?newsId=9724 (May 27, 2010).

⁴³ Adrian Schofield, "U.S./China MOU Expected To Aid NextGen Harmonization," *Aviation Daily*, (February 28, 2008): 1.

⁴⁴ *China Civil Aviation Report*, vol. 12, issue 2, April 2010, http://www.chinacivilaviation.com/article.asp?id=983 (May 27, 2010); "FAA, China Sign Environmental Pact", FAA Press Release, April 9, 2009, http://www.faa.gov/news/updates/?newsId=58271 (May 27, 2010).

clause required that before the FAA provided technical assistance abroad, the recipient of the assistance must agree to defend and indemnify the United States Government against claims arising out of those activities.⁴⁵

As a result of the Chinese restructuring, the FAA needed confirmation that the latest organizational iteration of the CAAC retained the authority to conclude new international agreements with the FAA. Through a March 2009 diplomatic note, the U.S. Department of State requested on behalf of the FAA clarification from the Chinese Ministry of Foreign Affairs. Receiving no response from the Ministry, on May 11, Pat Power, the FAA representative in Beijing contacted the CAAC and provided the updated language that an amendment to the existing 1986 MOA would need to include as required by the State and Justice Departments. Four days later, Dorothy Reimold, FAA's Acting Assistant Administrator for International Aviation met with CAAC Deputy Administrator Yang GuoQing to stress the importance of the new language and to explain the repercussions if the CAAC did not quickly agree to changes to the MOA. The FAA needed the updated agreement approved by the end of June or the FAA would have to cancel the fourth Chinese executive management development training class. Shortly, thereafter, the CAAC assigned responsibility for negotiating the new agreement to their aircraft airworthiness department.

On June 23, 2009, the U.S. Embassy delivered a letter from the U.S. economic counselor reiterating the information in the March diplomatic note and requested a response. The Ministry of Foreign Affairs responded six days later and stated that the Ministry of Transportation had responsibility for responding to the note. The U.S. Embassy subsequently sent a note to the Ministry of Transportation. Having received no response from the CAAC, on July 7, the FAA officially cancelled the EMDT IV workshop in Beijing scheduled for the first week of August. Almost 25 years of aviation cooperation seemed at risk.

In August, Acting Assistant Administrator Reimold again travelled to China to impress upon the new CAAC Deputy Administrator, Xia Xinghua, the importance of the MOA and the need for CAAC feedback. In August, the FAA sent a letter requesting that the CAAC make revisions of the MOA a priority to avoid delay or cancellation of FAA/CAA initiatives.⁴⁸

CAAC's Director General for Airworthiness met with Pat Power on September 15, 2009. The FAA recommended that the easiest way to implement the terms of the new liability clause would be to enter into a completely new agreement, since revising the 1986 MOA would be cumbersome. The CAAC, however, responded that to enter into a new agreement or amend the MOA would require coordination and approval from the Chinese Ministry of Foreign Affairs and the State Council, which could take several years to accomplish. In addition to a general concern about amending the overarching agreement, CAAC expressed specific concern with applying the

⁴⁵ "The Liability Clause in FAA International Agreements," FAA White Paper, January 21, 2010, FAA Historical Archives, File III 17.K.

⁴⁶ The Embassy of the United States of America, Beijing, Diplomatic Note No. 327, March 20, 2009, FAA Historical Archives, File III 17.K.

⁴⁷ "Memorandum of Agreement for Technical Cooperation: FAA/CAAC Timeline," FAA Historical Archives, File III 17.K.

⁴⁸ "Memorandum of Agreement for Technical Cooperation FAA/CAAC Issues," January 21, 2010, FAA Historical Archives, File III 17.K

updated liability language to the full scope of technical assistance and cooperative projects. ⁴⁹ Pat Power proposed to the CAAC that FAA and Department of State personnel travel to China to discuss mutual issues and concerns. The CAAC accepted the proposal. ⁵⁰

FAA Administrator Randy Babbitt made his first visit to China on October 14, 2009. While there, he expressed his support to continue the FAA/CAAC cooperative relationship. He explained to CAAC Administrator Li Jiaxiang, however, to do so would require an update to the liability language. The CAAC administrator agreed that completing the updates were a priority.

Following the Administrator's visit, on October 19, Beverly Sharkey from the FAA Chief Counsel's office travelled to China to work with the CAAC to develop alternative language for the liability clause. With the guidance of Pat Power, the FAA and the CAAC came to agreement on many of the proposed revisions. Following the Beijing discussions, FAA team members met with the U.S. Departments of State and Justice and suggested options for new agreements, including a new technical evaluation concept that would not require a liability clause. With approval for the new concept, the FAA and CAAC signed Annex 10, a technical evaluation annex authorizing the FAA to undertake a review of the transport aircraft certification process the CAAC was using to certify the regional jet, ARJ-21, being manufactured in China. ⁵¹

On November 5, 2009, the Chinese Ministry of Foreign Affairs formally responded to the March diplomatic note and confirmed that the CAAC was the executive agent for negotiating with the FAA.⁵² The FAA/CAAC agreement remained unresolved in mid-November, when President Barack Obama made his first state visit to China. While there, he and Chinese President Hu Jintao, issued a joint statement that, among other things, said:

The United States and China agreed to strengthen their cooperation on civil aviation, and confirmed their intent to expand the Memorandum of Agreement for Technical Cooperation in the field of Civil Aviation between the Federal Aviation Administration of the United States of America and the Civil Aviation Administration of China.⁵³

In January 2010, the FAA sent revised liability terms to the CAAC for review. On February 3, Jeffery Klang met with CAAC officials in Beijing to discuss revisions to the MOA. He suggested another face-to-face meeting between U.S. State Department, FAA, and CAAC officials to finalize language for the agreement. The FAA subsequently discussed the CAAC concerns with the State Department. After talking with the FAA, the State Department officials agreed that within the terms of the 1986 MOA, the FAA could apply the liability language on a case-by-case basis in the annexes.

⁴⁹ "Memorandum of Agreement for Technical Cooperation FAA/CAAC Issues."

^{50 &}quot;Memorandum of Agreement for Technical Cooperation: FAA/CAAC Timeline."

^{51 &}quot;Memorandum of Agreement for Technical Cooperation FAA/CAAC Issues."

^{52 &}quot;Memorandum of Agreement for Technical Cooperation: FAA/CAAC Timeline."

⁵³ White House Office of the Press Secretary, "U.S.-China Joint Statement," November 17, 2009, http://www.whitehouse.gov/the-press-office/us-china-joint-statement (June 10, 2010).

On April 22, 2010, a FAA/State Department team arrived in China. The U.S. team consisted of Jeffrey Klang, Pat Power, and Robyn Cicero from the FAA Office of International Aviation, Mark Bury and Beverly Sharkey from the FAA Office of Chief Counsel, and Dan Kachur and Tim Schnabel from the Department of State. In China for a week, the U.S. team worked with the CAAC to develop alternative language for the liability clause agreeable to the CAAC and the U.S. Departments of State and Justice.

The following month, FAA Administrator Randy Babbitt made his second visit to China. While in China, he reaffirmed the long-standing aviation partnership between the U.S. and China. On May 17, 2010, Babbitt and his CAAC counterpart, Li Jiaxiang, signed Annex 12 to the 1986 MOA for technical cooperation. This was the first agreement in which the FAA and CAAC used the updated liability language. Although Annex 12 covered a topic as mundane as temporary duty assignments, the fact that it contained mutually negotiated and accepted liability language proved groundbreaking. With the liability language now incorporated into one annex, it would become a matter of routine to incorporate it into other new or revised annexes. Moreover, the agreement allowed continuation of the important, long-term cooperation between the FAA and CAAC well into the future.

In a speech to an aviation forum, he pointed out that the work FAA and CAAC accomplish together "will play a major role in defining how we fly. It will be a very different operating environment. What's important is that the United States and China — again, the two countries with the largest aviation systems in the world — work together to ensure that our systems are harmonized and interoperable." ⁵⁵

⁵⁴ "Agreement in Beijing," Focus FAA, https://employees.faa.gov/news/focusfaa/story/?newsId=60818 (May 28, 2010).

⁵⁵ Randy Babbitt, "Cooperation Makes Win-Win," Remarks Prepared for Delivery to the China Aviation Development Forum, May 12, 2010, http://www.faa.gov/news/speeches/news_story.cfm?newsId=11397 (June 7, 2010).